



## **SRAM: parts for axle and cable entry.**

### **Notes regarding compatibility of parts.**

1. If this set includes any nuts for the axle, note that these (normally plated with a silver finish) must only be used on **Sram** rear axles. Their thread is not the same as for other (non-Sram) rear axles, but similar enough to permit them to be fitted to a Sturmey 3-speed or a Brompton 2-spnd axle (where thread engagement would be poor, and the thread would strip). So do not use any nuts in this set with Sturmey or Brompton rear hubs.
2. Note also that, for Sram a chain-tensioner nut is plain (whereas for Sturmey Archer there's a step at the inner end, and an inspection hole).
3. Torque-reaction tab-washers, under the wheel-nuts: if the axle-drop-out slots on the rear-frame are 8.5mm wide, use a washer with a single bent-over tab. But if the slots (post-2004) are 10mm wide, use pressings (marked SM) with two tabs, fitted the correct way round with the end marked TOP upwards (on the unfolded bike).

### **Securing a chain tensioner with the special nut & washer.**

Any tab washer under the wheel nut must be seating correctly, with the axle correctly positioned in the axle-plate-slots.

The correct torque for the main wheel nuts is a firm 22NM, but the chain tensioner nut, in contrast, should not be done up as tight, max torque 8NM.

subtext gadj hub (SR only)

### **Hub-Gear adjustment.**

Adjustment of the gear control must be carried out with the bike fully unfolded (i.e NOT parked), and with the indicator rod screwed **fully home** into the hub (and backed off not more than half a turn to align with the cable). The aim is to make sure that the indicator rod & chain down at the the rear axle moves to the correct position in response to moving the trigger. For this the cable has to be running well: it must be free of kinks or sharp radii, with the cable pulley rolling freely.

While setting gears, you should ensure that the gear you select by moving the control trigger has indeed engaged in the hub, and to this end, each time you are moving the trigger, keep the wheel spinning forwards, and pedal back and forwards, to ensure the gear engages. It's easiest, when actually altering the setting, to have the cable slack: so select top gear and back and forward pedal a bit first.

If you cannot obtain a satisfactory setting, then the most likely cause is either the cable not running freely, or damage to the indicator chain itself, where it runs into the axle end. Otherwise, the fault may be with the hub internals.

### **SRAM 3-spnd gear adjustment:.**

The cable is made tighter by pushing the adjustor A further onto the grooved end B of the indicator chain GICH: to obtain a looser setting, the spring clip C has to be depressed.

You can usually get things right first time by moving the trigger into top gear, pulling on the adjustor (away from the pulley housing CPULA), and then feeding the grooved end B of the indicator chain into the adjustor until it is just not loose, i.e. *WITHOUT* pulling the indicator chain out of the axle at all. The setting is correct when:-

- with the trigger in top, the cable is just slack (with a *Brompton Y-trigger* fitted, there should be up to 5mm side-to-side movement at D-D, and with a *Sram Torpedo* trigger, rather less), in other words neither flopping around too much, nor taut. If, when you try pulling the adjustor A away from the CPULA, you can see any movement of the indicator chain back into the axle where it enters it, then the setting is too tight, and
- with the trigger in low, the indicator chain (where it enters the end of the axle) should either move not at all, or perhaps up to 1mm, when you pull the adjustor towards the CPULA (if it moves more than this, then the setting is probably too loose: on the other hand, if, while back-peddalling and moving the trigger slowly from mid- to low-position, you see that the indicator chain stops moving out of the end of the axle *before* the trigger has clicked into low-position, then the setting is probably too tight), and
- when pedalling forwards (under no load) and changing through the 3 gears, both up and down, all three gears are positively selected.

